

**Amendments to the Claims:**

1-27. (canceled)

28. (currently amended) An isolated nucleic acid encoding a polypeptide having at least 80% nucleic acid sequence identity to:

- (a) a nucleic acid sequence encoding the amino acid sequence of the polypeptide of SEQ ID NO:116 shown in Figure 66 (SEQ ID NO:116);
  - (b) a nucleic acid sequence encoding the amino acid sequence of the polypeptide of SEQ ID NO:116 shown in Figure 66 (SEQ ID NO:116), lacking its associated signal peptide;
  - (c) a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 66 (SEQ ID NO:116);
  - (d) a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 66 (SEQ ID NO:116), lacking its associated signal peptide;
  - (e) the nucleic acid sequence shown in Figure 65 (SEQ ID NO:115);
- [[[(f)]]] (d) the amino acid sequence of the polypeptide encoded by the full-length coding sequence of the nucleic acid sequence of SEQ ID NO:115 shown in Figure 65 (SEQ ID NO:115); or
- [[[(g)]]] (e) the amino acid sequence of the polypeptide encoded by the full-length coding sequence of the cDNA deposited under ATCC accession number 203278, wherein the encoded polypeptide induces chondrocyte re-differentiation.

29. (currently amended) The isolated nucleic acid of Claim 28 encoding a polypeptide having at least 85% nucleic acid sequence identity to:

- (a) a nucleic acid sequence encoding the amino acid sequence of the polypeptide of SEQ ID NO:116 shown in Figure 66 (SEQ ID NO:116);
- (b) a nucleic acid sequence encoding the amino acid sequence of the polypeptide of SEQ ID NO:116 shown in Figure 66 (SEQ ID NO:116), lacking its associated signal peptide;
- (c) a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 66 (SEQ ID NO:116);
- (d) a nucleic acid sequence encoding the extracellular domain of the polypeptide

shown in Figure 66 (SEQ ID NO:116), lacking its associated signal peptide;

(e) — the nucleic acid sequence shown in Figure 65 (SEQ ID NO:115);

[(f)] (d) the amino acid sequence of the polypeptide encoded by the full-length coding sequence of the nucleic acid sequence of SEQ ID NO:115 shown in Figure 65 (SEQ ID NO:115); or

[(g)] (e) the amino acid sequence of the polypeptide encoded by the full-length coding sequence of the cDNA deposited under ATCC accession number 203278, wherein the encoded polypeptide induces chondrocyte re-differentiation.

30. (currently amended) The isolated nucleic acid of Claim 28 encoding a polypeptide having at least 90% nucleic acid sequence identity to:

(a) a nucleic acid sequence encoding the amino acid sequence of the polypeptide of SEQ ID NO:116 shown in Figure 66 (SEQ ID NO:116);

(b) a nucleic acid sequence encoding the amino acid sequence of the polypeptide of SEQ ID NO:116 shown in Figure 66 (SEQ ID NO:116), lacking its associated signal peptide;

(c) — a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 66 (SEQ ID NO:116);

(d) — a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 66 (SEQ ID NO:116), lacking its associated signal peptide;

(e) — the nucleic acid sequence shown in Figure 65 (SEQ ID NO:115);

[(f)] (d) the amino acid sequence of the polypeptide encoded by the full-length coding sequence of the nucleic acid sequence of SEQ ID NO:115 shown in Figure 65 (SEQ ID NO:115); or

[(g)] (e) the amino acid sequence of the polypeptide encoded by the full-length coding sequence of the cDNA deposited under ATCC accession number 203278, wherein the encoded polypeptide induces chondrocyte re-differentiation.

31. (currently amended) The isolated nucleic acid of Claim 28 encoding a polypeptide having at least 95% nucleic acid sequence identity to:

(a) a nucleic acid sequence encoding the amino acid sequence of the polypeptide of

SEQ ID NO:116 shown in Figure 66 (SEQ ID NO:116);

- (b) a nucleic acid sequence encoding the amino acid sequence of the polypeptide of SEQ ID NO:116 shown in Figure 66 (SEQ ID NO:116), lacking its associated signal peptide;
- (c) a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 66 (SEQ ID NO:116);
- (d) a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 66 (SEQ ID NO:116), lacking its associated signal peptide;
- (e) the nucleic acid sequence shown in Figure 65 (SEQ ID NO:115);
- [(f)] (d) the amino acid sequence of the polypeptide encoded by the full-length coding sequence of the nucleic acid sequence of SEQ ID NO:115 shown in Figure 65 (SEQ ID NO:115); or
- [(g)] (e) the amino acid sequence of the polypeptide encoded by the full-length coding sequence of the cDNA deposited under ATCC accession number 203278, wherein the encoded polypeptide induces chondrocyte re-differentiation.

32. (currently amended) The isolated nucleic acid of Claim 28 encoding a polypeptide having at least 99% nucleic acid sequence identity to:

- (a) a nucleic acid sequence encoding the amino acid sequence of the polypeptide of SEQ ID NO:116 shown in Figure 66 (SEQ ID NO:116);
- (b) a nucleic acid sequence encoding the amino acid sequence of the polypeptide of SEQ ID NO:116 shown in Figure 66 (SEQ ID NO:116), lacking its associated signal peptide;
- (c) a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 66 (SEQ ID NO:116);
- (d) a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 66 (SEQ ID NO:116), lacking its associated signal peptide;
- (e) the nucleic acid sequence shown in Figure 65 (SEQ ID NO:115);
- [(f)] (d) the amino acid sequence of the polypeptide encoded by the full-length coding sequence of the nucleic acid sequence of SEQ ID NO:115 shown in Figure 65 (SEQ ID NO:115); or
- [(g)] (e) the amino acid sequence of the polypeptide encoded by the full-length

coding sequence of the cDNA deposited under ATCC accession number 203278, wherein the encoded polypeptide induces chondrocyte re-differentiation.

33. (currently amended) An isolated nucleic acid comprising:

(a) a nucleic acid sequence encoding the polypeptide of SEQ ID NO:116 shown in Figure 66 (SEQ ID NO:116)

(b) a nucleic acid sequence encoding the polypeptide of SEQ ID NO:116 shown in Figure 66 (SEQ ID NO:116), lacking its associated signal peptide;

(c) — a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 66 (SEQ ID NO:116);

(d) — a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 66 (SEQ ID NO:116), lacking its associated signal peptide;

[(e)] (d) the nucleic acid sequence of SEQ ID NO:115 shown in Figure 65 (SEQ ID NO:115);

[(f)] (e) the full-length coding sequence of the nucleic acid sequence of SEQ ID NO:115 shown in Figure 65 (SEQ ID NO:115); or

[(g)] (f) the full-length coding sequence of the cDNA deposited under ATCC accession number 203278.

34. (currently amended) The isolated nucleic acid of Claim 33 comprising a nucleic acid sequence encoding the polypeptide of SEQ ID NO:116 shown in Figure 66 (SEQ ID NO:116).

35. (currently amended) The isolated nucleic acid of Claim 33 comprising a nucleic acid sequence encoding the polypeptide of SEQ ID NO:116 shown in Figure 66 (SEQ ID NO:116), lacking its associated signal peptide.

36. (canceled)

37. (canceled)

38. (currently amended) The isolated nucleic acid of Claim 33 comprising the nucleic

acid sequence of SEQ ID NO:115 shown in Figure 65 (SEQ ID NO:115).

39. (currently amended) The isolated nucleic acid of Claim 33 comprising the full-length coding sequence of the nucleic acid sequence of SEQ ID NO:115 shown in Figure 65 (SEQ ID NO:115).

40. (previously presented) The isolated nucleic acid of Claim 33 comprising the full-length coding sequence of the cDNA deposited under ATCC accession number 203278.

41. (canceled)

42. (canceled)

43. (canceled)

44. (previously presented) A vector comprising the nucleic acid of Claim 28.

45. (previously presented) The vector of Claim 44, wherein said nucleic acid is operably linked to control sequences recognized by a host cell transformed with the vector.

46. (previously presented) A host cell comprising the vector of Claim 44.

47. (previously presented) The host cell of Claim 46, wherein said cell is a CHO cell, an *E. coli* or a yeast cell.